

Work Order ID 135452 -2

Wednesday, August 12, 2015 4:29:10 PM

135452

Page 1

Item ID: 646.3301

Revision ID:

Item Name: Upper Cutter Assy

Start Date: 8/12/15 Start Qty: 5.00

Required Date: 8/12/15 Req'd Qty: 5.00

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals:

Process Plan: MLJ

Date: AUG 14 2015 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								

646.3300

NC3

110

Pick Kit

0.00

110

Packaging

Memo

0.01

Packaging

120

120

Small Fab

0.00

Memo

0.05

Small Fab

TWO fastener must be install finger-tight (see note 9).

Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.

A/R RTV LOCTITE 598: M131311

exp. date: 11/16

DAS
36
9-89

DAS
36
9-89

Work Order ID 135452

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135452

Page 2

Item ID: 646.3301 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Upper Cutter Assy
 Start Date: 8/12/15 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 8/12/15 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC5- Inspect part completeness to step on W/O	0.00							DAS
130									38
QC	Memo	0.01							SEP 02 2015
Quality Control									
140	Identify as per dwg & Stock Location: <u>check</u>	0.00							
140									
Packaging	Memo	0.00							2X 27 8-89
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								
150	QC21- Final Inspection - Work Order Release	0.00							SEP 03 2015
150									15/9/13
QC	Memo	0.00							
Quality Control									

SN 20150903

Picklist Print

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Page 1

Work Order ID: 135452

135452

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assy

Start Date: 8/12/15

Required Date: 8/12/15

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM IPP
REV:B 15.01.07 AS PER DWG NC3 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3310 *646 3310* LH Half		Manufactured	No			110	Each	17.0000	1	5		15/08/24	DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				MF				17					
				120486				1					
				121853				3					
				124425				10					
				125832				3					
646.3311 *646 3311* RH Half		Manufactured	No			110	Each	11.0000	1	5		15/08/24	DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				MF3				11					
				125166				7					
				131608				4					
646.3312 *646 3312* Center Plate		Manufactured	No			110	Each	18.0000	1	5		15/08/24	DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				MF				18					
				121871				4					
				125437				9					
				125852				5					

Picklist Print

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Work Order ID: 135452

135452

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assy

Start Date: 8/12/15

Required Date: 8/12/15

Start Qty: 5.00

Required Qty: 5.00

646.3313

Manufactured No

110

Each

6.0000

1

5

646 3313

Upper Guide

15/08/24 DAS 36 9-89

Location

Loc Qty

Loc Code

cck102

6

131609

6

646.3314

Manufactured No

110

Each

11.0000

1

5

646 3314

Blade

15/08/24 DAS 36 9-89

Location

Loc Qty

Loc Code

MF

11

127669

11

646.3315

Manufactured No

110

Each

7.0000

1

5

646 3315

Blade

15/08/24 DAS 36 9-89

Location

Loc Qty

Loc Code

MF

7

123095

4

131610

3

646.3316

Manufactured No

110

Each

2.0000

1

5

646 3316

Blade

15/08/24 DAS 36 9-89

Location

Loc Qty

Loc Code

MF

2

127462

2

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Shop Packet Print

Page 2

Picklist Print

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Work Order ID: 135452

135452

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assy

Start Date: 8/12/15

Required Date: 8/12/15

Start Qty: 5.00

Required Qty: 5.00

NAS1149FN832P

Purchased

No

110

Each

2,963.000

36

180

15/08/24
DAS
36
9-89

NAS1149FN832P

Washer

Location

Loc Qty

Loc Code

ST260a

1704

125268

1704

180

st268

1259

125268

338

M130388

921

MS21042L08

Purchased

No

110

Each

1,162.000

18

90

15/08/24
DAS
36
9-89

MS21042L 08

Nut

Location

Loc Qty

Loc Code

CA

101

m129682

101

ST260a

243

m131697

243

ST304

818

123900

16

m128401

102

m128429

3

m131317

197

m132930

500

90

Picklist Print

Page 4

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Work Order ID: 135452

135452

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 8/12/15

Required Date: 8/12/15

Start Qty: 5.00

Required Qty: 5.00

NAS1149F0332P

Purchased

No

110

Each

1,516.000

6

30

NAS1149F0332P

Washer

DAS
36
9-89
15/08/24

Location

Loc Qty

Loc Code

GA

222

122063

222

ST260a

1201

m128401

6

m131026

80

m131697

1115

st268

93

123900

7

m130388

86

30

AN3-12A

Purchased

No

110

Each

55.0000

2

10

AN3-12A

Bolt

DAS
36
9-89
15/08/24

Location

Loc Qty

Loc Code

CA

55

m129682

55

10

Picklist Print

Page 5

Wednesday, August 12, 2015 4:29:10 PM

Work Order ID: 135452

135452

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 8/12/15

Required Date: 8/12/15

Start Qty: 5.00

Required Qty: 5.00

MS21042L3

Purchased

No

110

Each

1,578.000

3

15

15/08/24

DAS
36
9.89

MS21042L3

Nut

Location

Loc Qty

Loc Code

FP001

393

M130922

393

GA

270

M131317

270

ST305

915

116549

12

126333

49

M128754

2

M132123

17

M132382

2

M132883

333

M132930

500

15

MS27039-08-19

Purchased

No

110

Each

670.0000

18

90

15/08/24

DAS
36
9.89

MS27039-08-19

Screw

Location

Loc Qty

Loc Code

ST273A

638

m131317

388

m132930

250

ST281

32

m127904

3

m131264

29

90

Picklist Print

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Wednesday, August 12, 2015 4:29:10 PM

Work Order ID: 135452

135452

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 8/12/15

Required Date: 8/12/15

Start Qty: 5.00

Required Qty: 5.00

AN3-14A

Purchased

No

110

Each

148.0000

1

5

DAS
36
9-89

AN3-14A

Bolt

15/08/24

Location

Loc Qty

Loc Code

ST338a

100

m132825

100

ST348

48

m132680

48

5

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04765

SHEET 1 OF 1

DWG NO. 646.3300

REV: NC

PREPARED BY J. SOTO

DATE: 12/08/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: UPPER CUTTER ASSY

APPROVED BY: ENGR. *[Signature]*

MFG. *[Signature]*

QC *[Signature]*

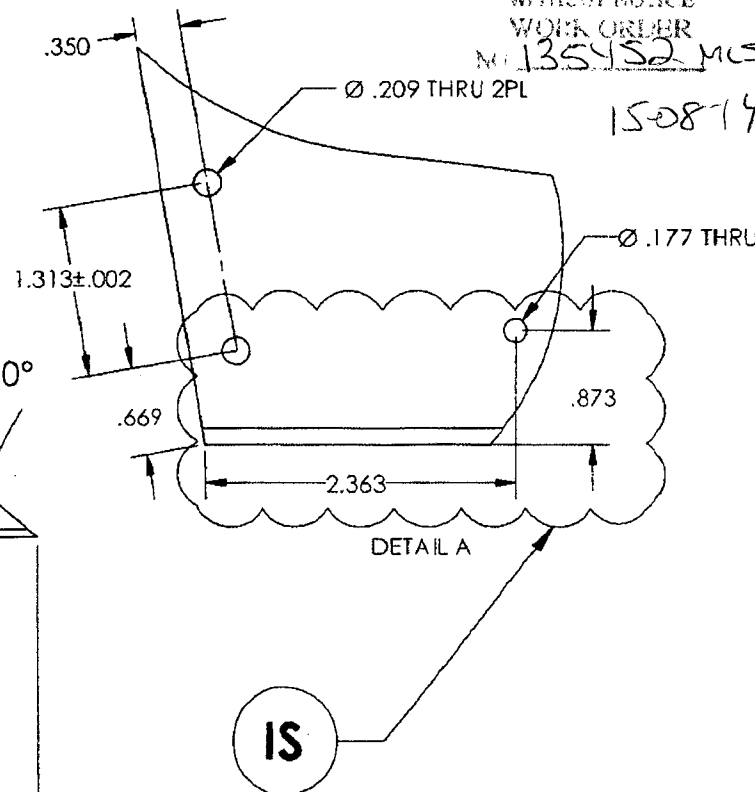
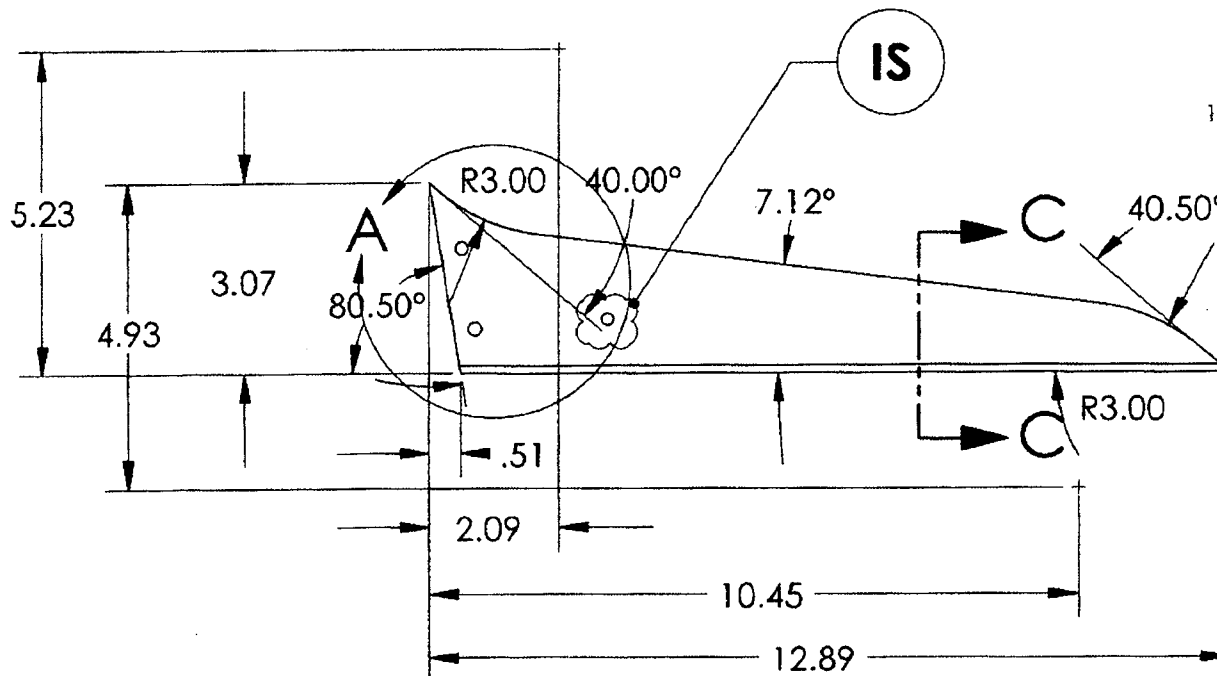
EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD
C-CREATE
R-REVISE
D-DELETE

REASON: ADDED HOLE DIMENSION TO 646.3313.

SHEET 5 IS:

STAMP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 135432 M/S
15-08-14



DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

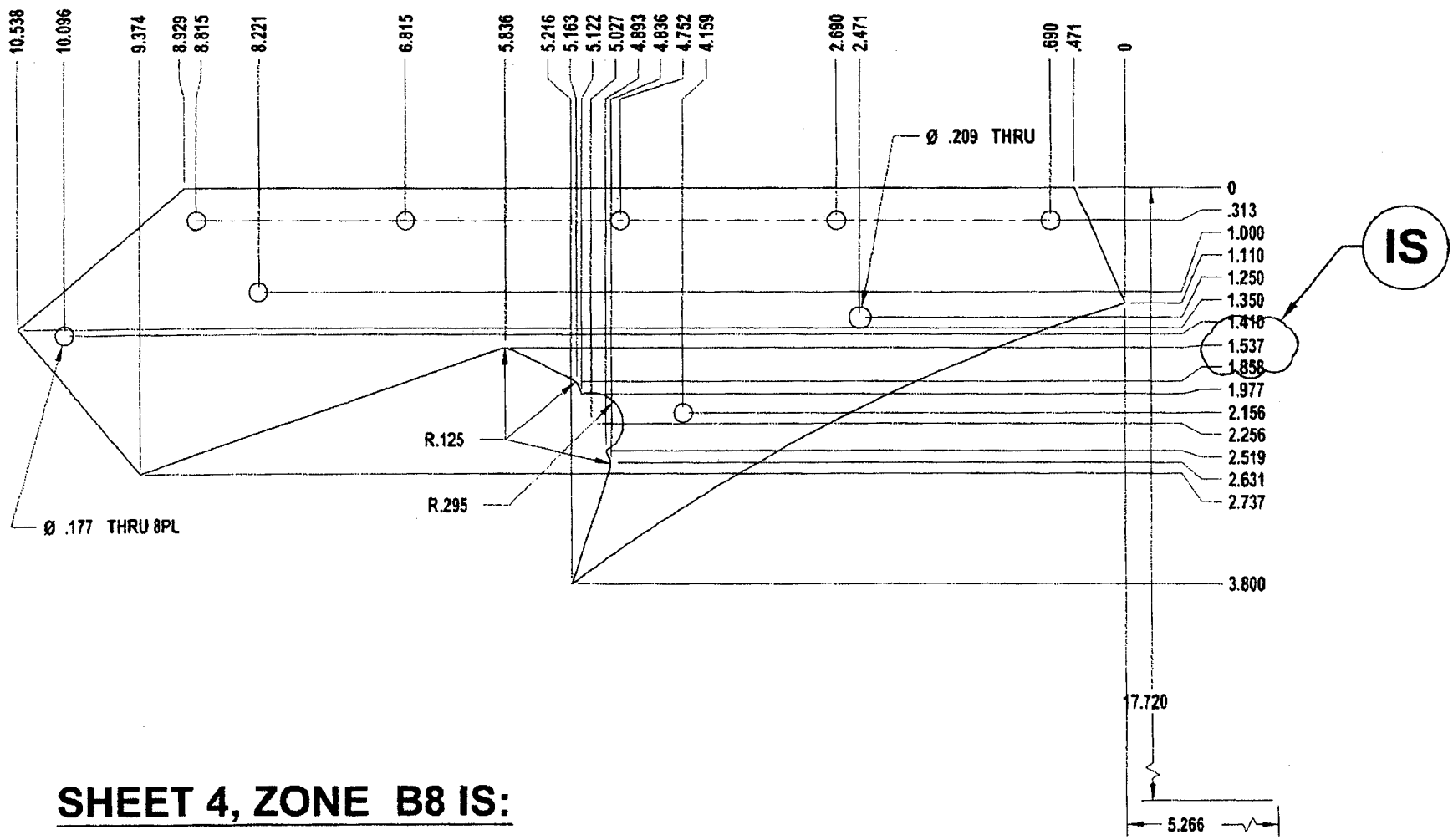
CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03724				SHEET 1 OF 1	
	DWG NO. 646.3300	REV: N/C	PREPARED BY B. PETERS	DATE: 12/05/12	EFFECT ON DWG ☐ INC. ☒ UNINC.	
	DWG TITLE: UPPER CUTTER ASSY					
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED ORDINATE DIMENSION.				ECR: D-12-025	



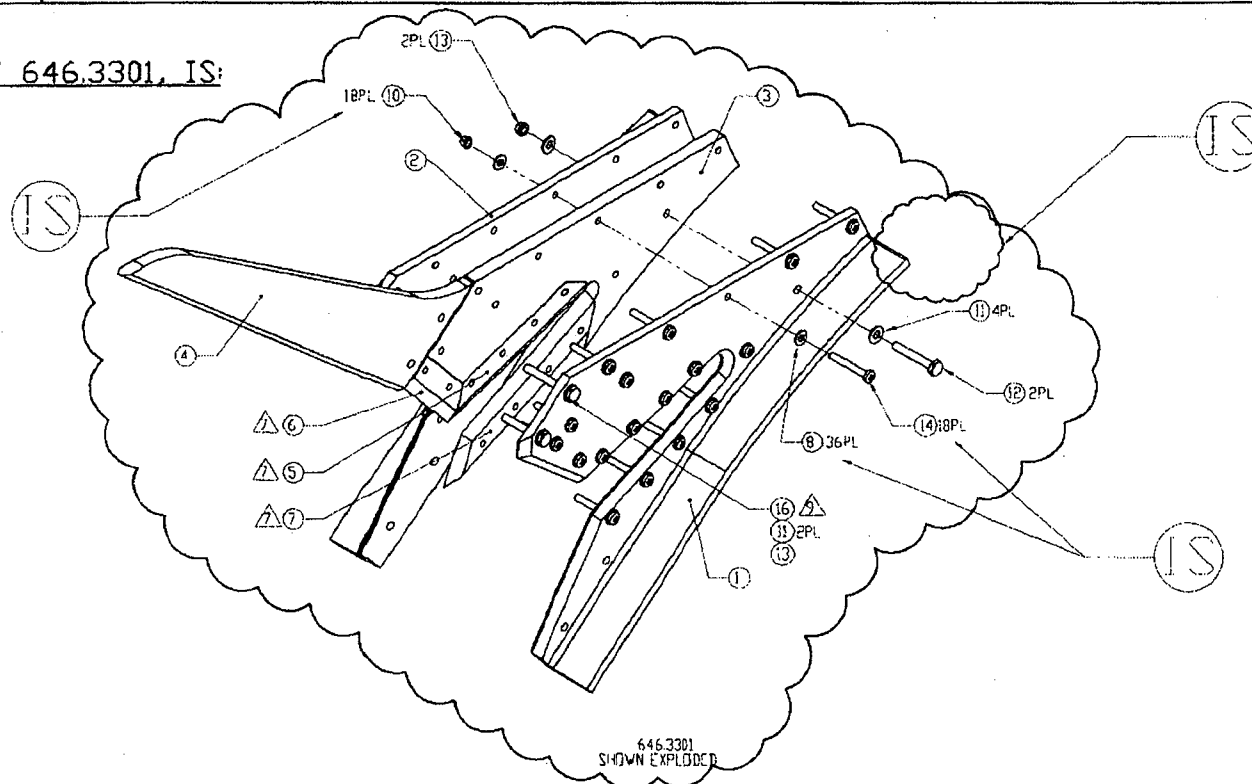
SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:	☐ RFMS ☐ MDL ☐ INSTALL INSTRU ☐ ICA ☐ BOM	CHANGE CATEGORY ☐ MAJOR ☒ MINOR	DER REVIEW REQUIRED ☐ YES ☒ NO
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APICAL
INDUSTRIES, INC.

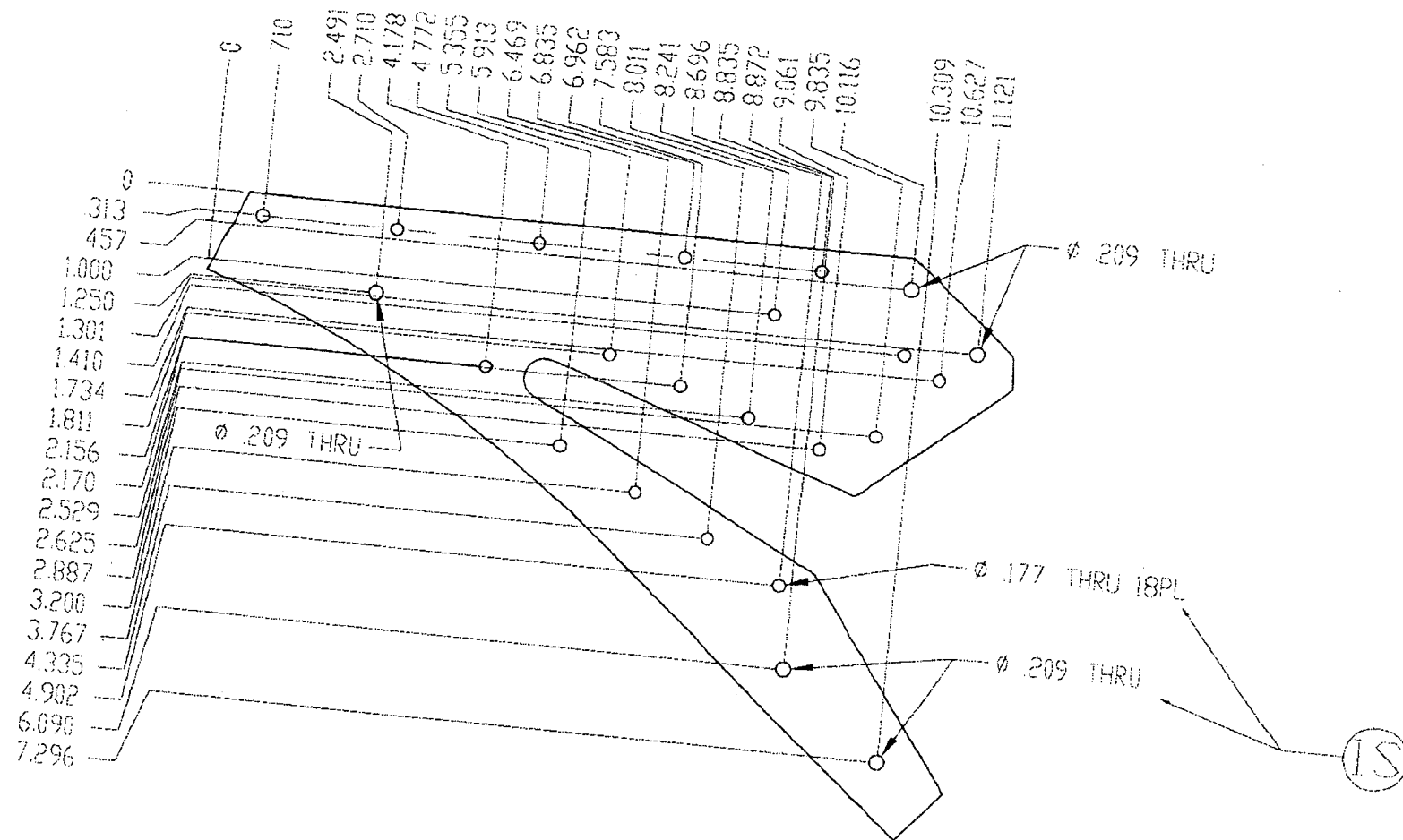
ENGINEERING CHANGE NOTICE NO.		02196		SHEET 1 OF 2	
DWG NO.	646.3300	REV: N/C	PREPARED BY S. HUFF	DATE: 01/05/09	EFFECT ON DWG ☐ INC. ☒ UNINC.
DWG TITLE: UPPER CUTTER ASSY					
APPROVED BY:	ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF:	NEXT ORDER
REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS					
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE					

SHEET 1, VIEW 646.3301, IS:



14	R	601.2765	18	SCREW	MS27039-0819
10	R	601.1541	18	LOCKNUT	MS21042L08
9	D	601.2766	3	RIVET	MS20470AD5-18
8	R	601.2764	36	WASHER	NAS1149FN832P
			.3301		
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED:				☐ MDL ☒ INSTALL INSTRUC ☒ ICA ☐ FMS ☒ BOM	CHANGE CATEGORY ☐ MAJOR ☒ MINOR
				DER REVIEW REQUIRED ☐ YES ☒ NO	

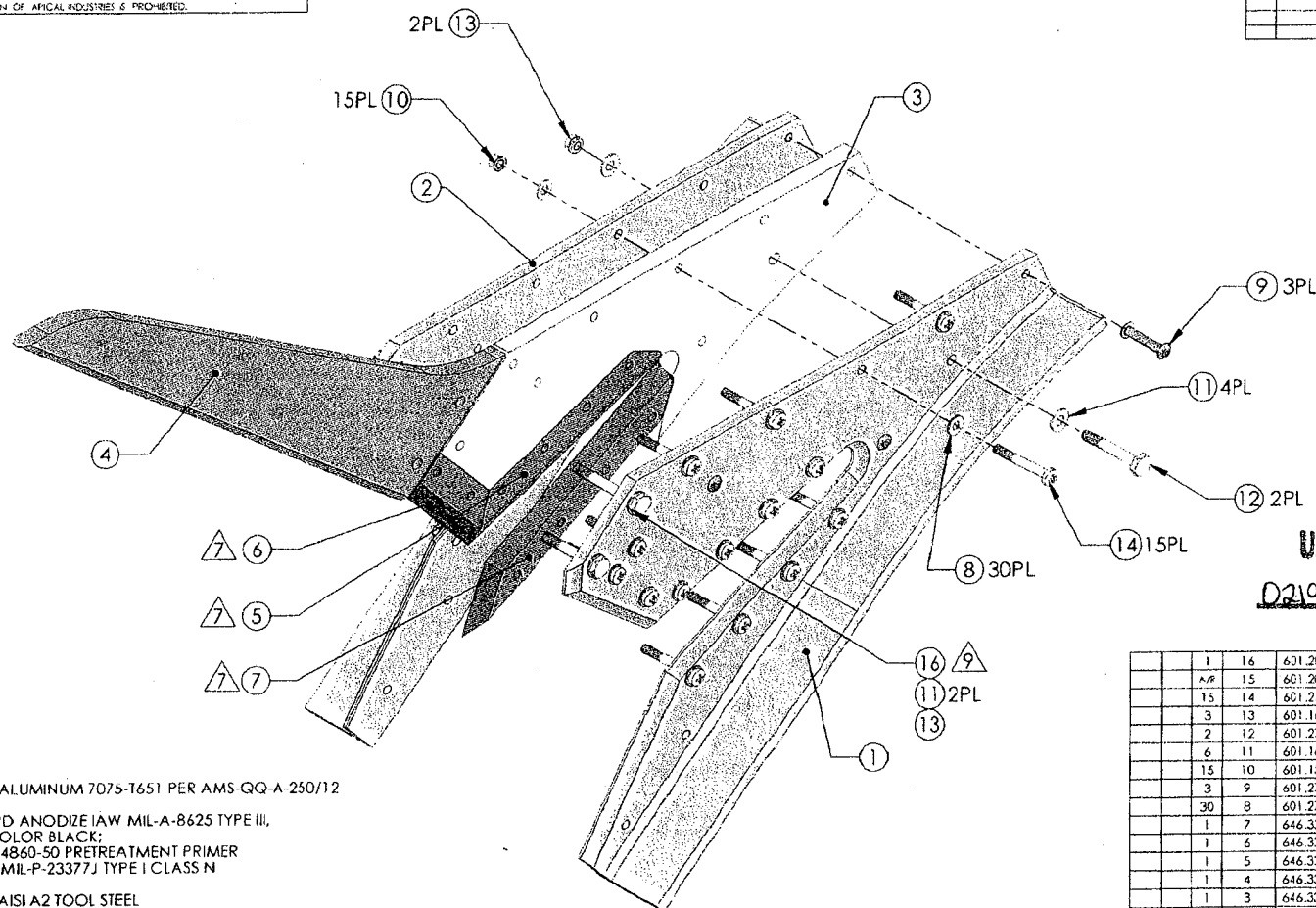
SHEET 3, SECTION VIEW A-A, IS:

SECTION A-A 

PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
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REV	DESCRIPTION	DATE	APPROVED



UNINCORPORATED ECN(s)

D2196, C3724, 04765

NOTES:

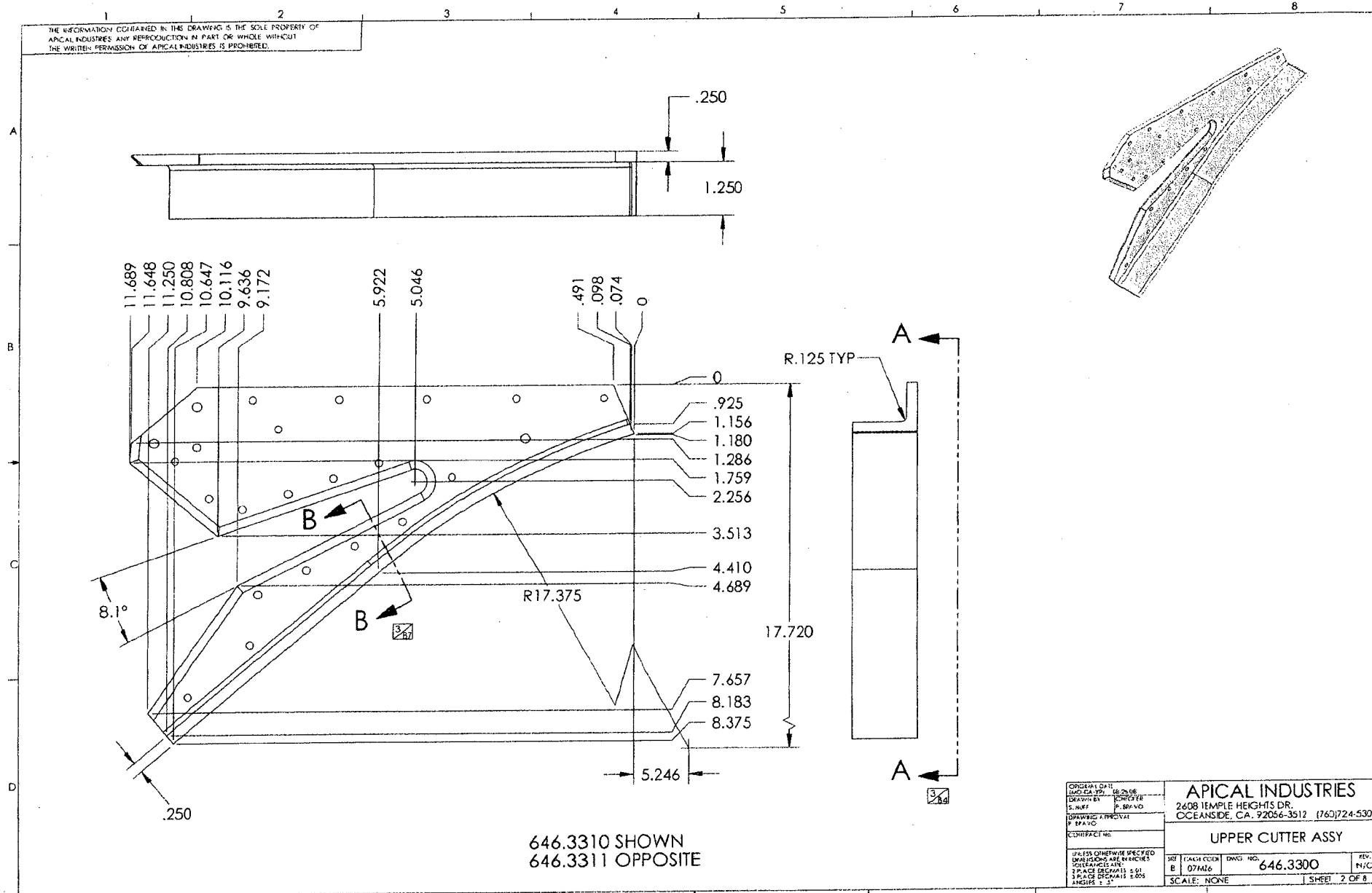
- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2. COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
- 3 MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS
- 4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
6. IDENTIFY IAW MPP-120
- 7 APPLY F/N 15 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5, 6 & 7 UPON ASSEMBLY
- 8 CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE
- 9 INSTALL FASTENER FINGER-TIGHT

646.3301
SHOWN EXPLODED

QTY	FIND #	PART #	DESCRIPTION	MATL	SPEC
1	16	601.2834	BOLT	AISI 14-4	
15	15	601.2045	RIV. LOC.HIE 598		
15	14	601.2765	SCREW	MS2703-0815	
3	13	601.1624	LOCKNUT	MS2703-0815	
2	12	601.2763	BOLT	MS2703-0815	
6	11	601.1607	WASHER	MS2703-0815	
15	10	601.1541	LOCKNUT	MS2703-0815	
3	9	601.2766	RIVET	MS2703-0815	
30	8	601.2764	WASHER	MS2703-0815	
1	7	646.3316	BLADE		
1	6	646.3315	BLADE		
1	5	646.3314	BLADE		
1	4	646.3313	UPPER GUIDE		
1	3	646.3312	CENTER PLATE		
1	2	646.3311	RH HALF		
1	1	646.3310	LH HALF		
1	1	646.3301	UPPER CUTTER ASSY		
QTY	FIND #	PART #	DESCRIPTION	MATL	SPEC
1	16	601.2834	BOLT	AISI 14-4	
15	15	601.2045	RIV. LOC.HIE 598		
15	14	601.2765	SCREW	MS2703-0815	
3	13	601.1624	LOCKNUT	MS2703-0815	
2	12	601.2763	BOLT	MS2703-0815	
6	11	601.1607	WASHER	MS2703-0815	
15	10	601.1541	LOCKNUT	MS2703-0815	
3	9	601.2766	RIVET	MS2703-0815	
30	8	601.2764	WASHER	MS2703-0815	
1	7	646.3316	BLADE		
1	6	646.3315	BLADE		
1	5	646.3314	BLADE		
1	4	646.3313	UPPER GUIDE		
1	3	646.3312	CENTER PLATE		
1	2	646.3311	RH HALF		
1	1	646.3310	LH HALF		
1	1	646.3301	UPPER CUTTER ASSY		

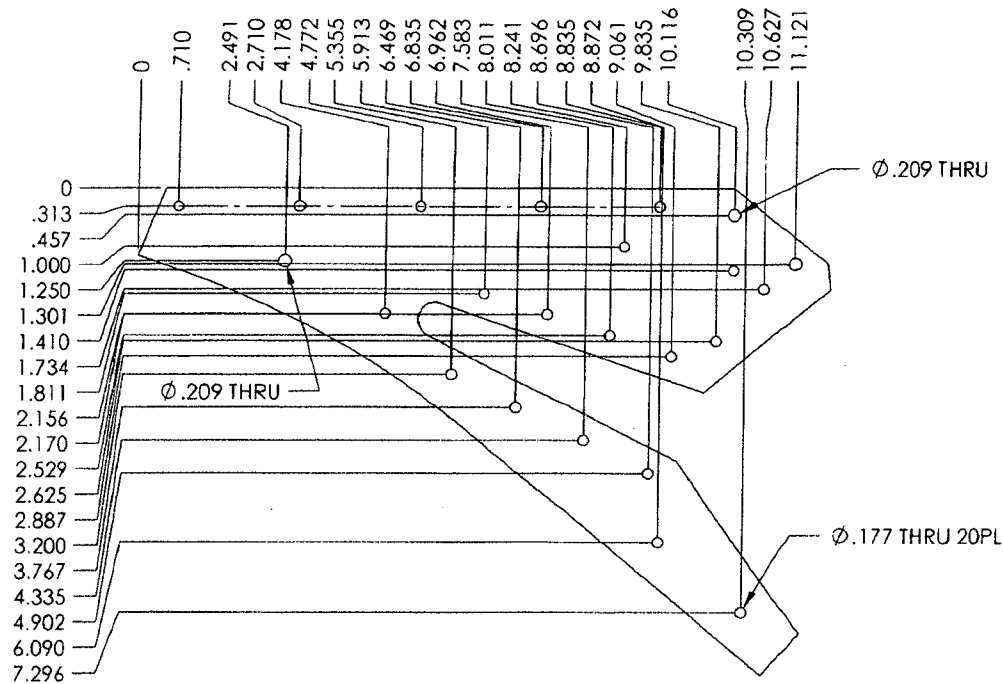
APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760) 724-5300
UPPER CUTTER ASSY
646.3300
SCALE NONE SHEET 1 OF 8

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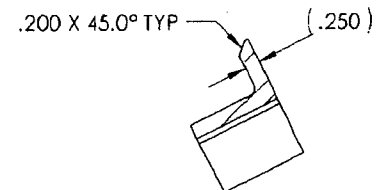


ORIGINAL DATE 10/01/00 DRAWN BY S. HOFF CHECKED BY P. SPYVO DATE 10/01/00		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UPPER CUTTER ASSY		REV. N/C	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE TO .01 FRACTIONS ARE TO 1/16 ANGLES ARE TO .5°		Dwg. No. 646.3300	SHEET 2 OF 8
SCALE: NONE		SHEET 2 OF 8	

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SECTION A-A

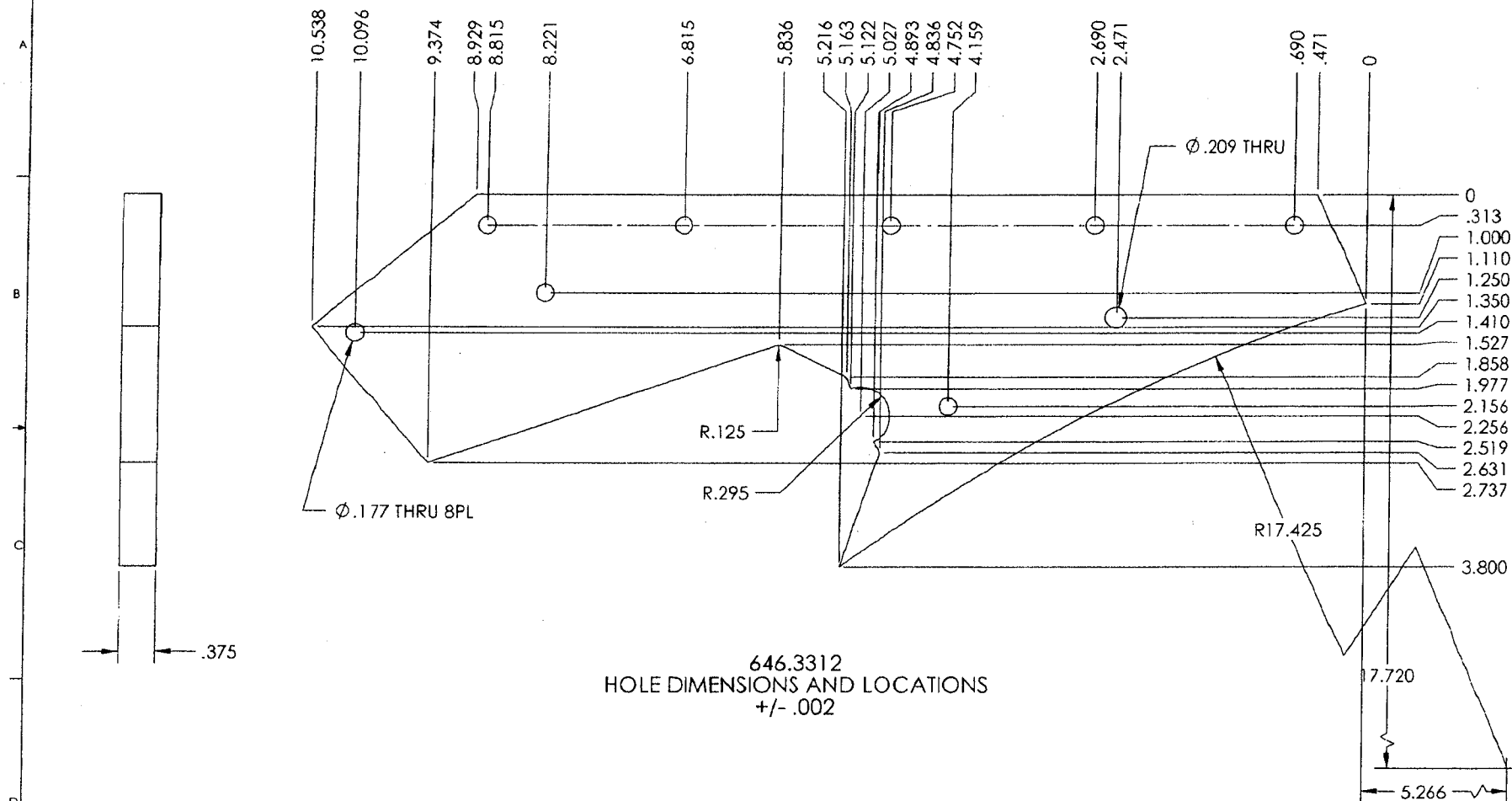


SECTION B-B

ORIGINAL DATE 1/20/04 DRAWN BY S. HUNT DESIGNED BY D. HUNTO		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UPPER CUTTER ASSY		646.3300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 3 PLACE DECIMALS ±.001 ANGLES ±.5°		SCALE NONE	SHEET 3 OF 8

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THE WRITTEN PERMISSION OF APCAL INDUSTRIES IS PROHIBITED.

ATTACHMENTS			
REV	DESCRIPTION	DATE	APPROVED

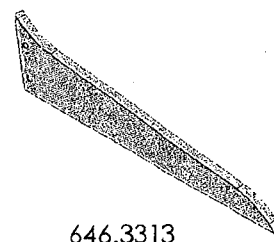
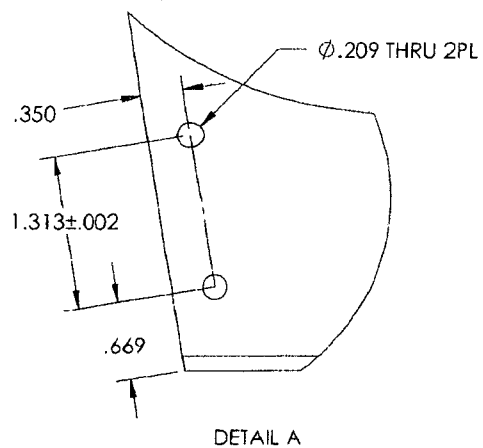
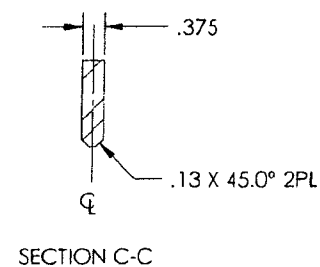
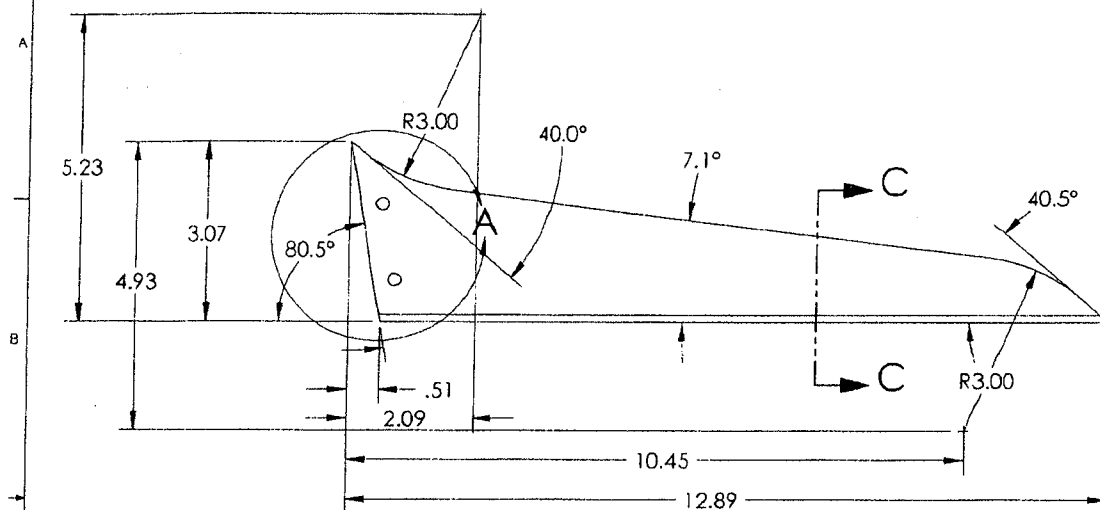


646.3312
HOLE DIMENSIONS AND LOCATIONS
+/- .002

[illegible]

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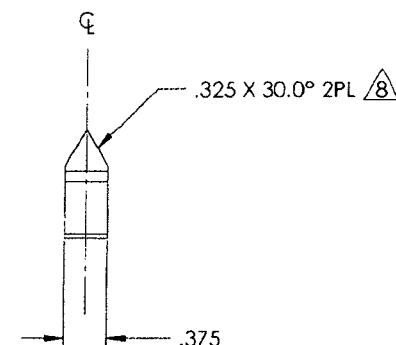
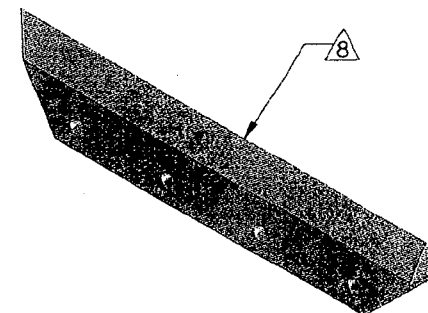
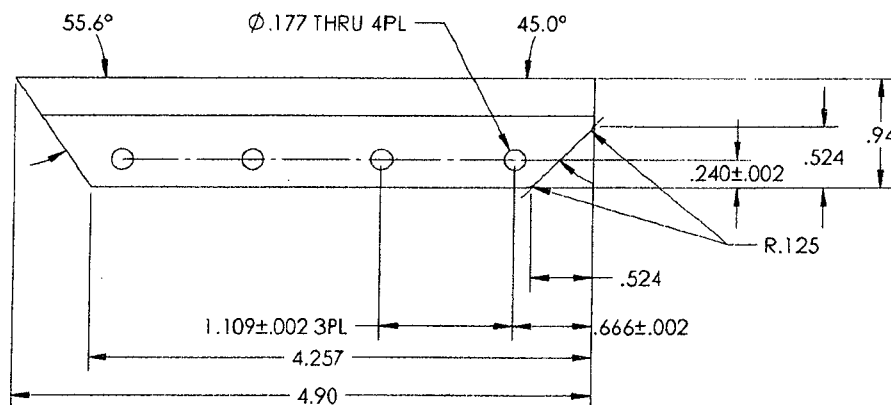
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE: 08-26-95 AND DATE: 08-26-95 DRAWN BY: CHESTER J. HUI DESIGNED APPROVAL: J. HUI CHECKED: J. HUI CONTRACT:			
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300			
UPPER CUTTER ASSY			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS: .01 3 PLACE DECIMALS: .001 ANGLES: .5°	SURF. CODE: 07A116 DIM. KEY: 646.3300	REV. N/C	SHEET 5 OF 8

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISED		DATE	APPROVED
REV	DESCRIPTION		

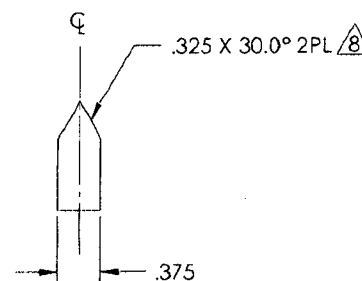
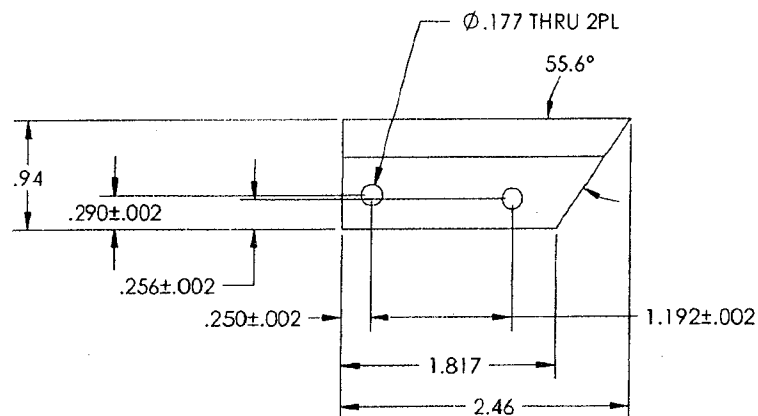
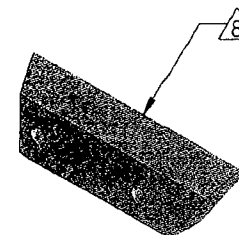


646.3314

ORIGINAL DATE 1/10/2008 DRAWN BY S. HUBB CHECKED BY P. BRAND DRAWING APPROVAL P. BRAND DATE 08/26/08 CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
PRESS GATE PEEK SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. PLACE DECIMALS 1.01 2. PLACE DECIMALS 1.02 ANGLES 1.5°		UPPER CUTTER ASSY	
SWT	CALCULATED	QWC	NO
B	CTM16	646.3300	REV N/C
SCALE NONE		SHEET 6 OF 8	

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REVISION			
REV.	DESCRIPTION	DATE	APPROVED

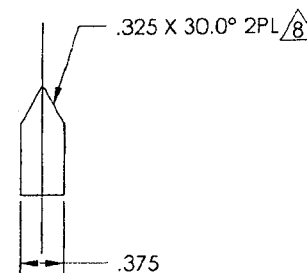
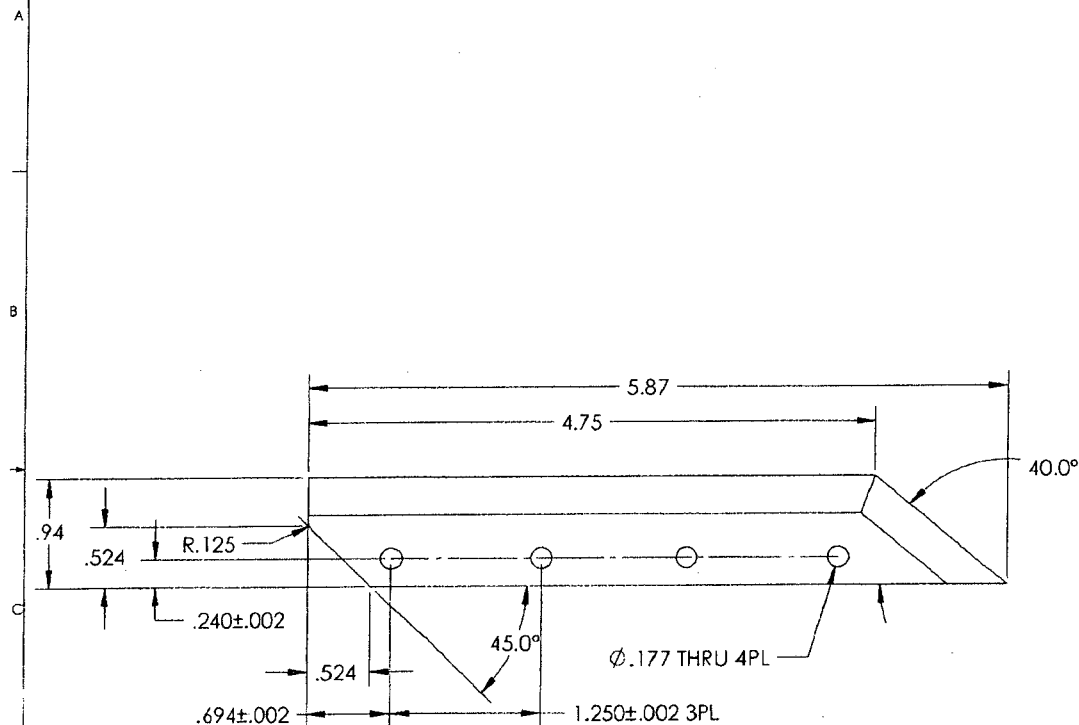
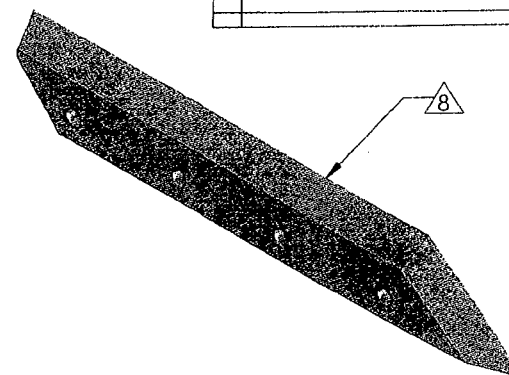


646.3315

ORIGINAL DATE: 08-26-02 DRAWN BY: J. K. KETTER S. HUFF P. BRAYO DRAWING APPROVAL: P. BRAYO 08-26-02 CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS FOR 3 PLACE DECIMALS FOR ALL OTHERS		REF. CASE CODE: 8 07416 SCALE: NONE	SHEET 7 OF 8
		646.3300 N/C	

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REVISION			
REV.	DESCRIPTION	DATE	APPROVED



646.3316

ORIGINAL DATE (MM-DD-YY) 08-26-08		APICAL INDUSTRIES	
DRAWN BY: N. NICH	CHECKED: J. BRAY	2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVED: J. BRAY	DATE: 08-26-08	OCEANSIDE, CA. 92056-3512 (760)724-5300	
CONTRACT NO.		UPPER CUTTER ASSY	
SHEET OTHER PANEL SPECIFIC		REV. 8	REV. N/C
PROVIDING PARTS IN INCHES		SCALE: NONE	SCALE: NONE
TRACTION DIAGRAMS: 1:1		DWG. NO. 646.3300	REV. N/C
STRAIGHT DIMENSIONS: 1:1		SHEET 2 OF 8	